

Punnet Square: The Potters

Question 1: Harry has dark/brown hair like his father, but his mom had red hair. Using the genotypes of **rr**, **Rr**, and **RR**, what possible genotypes does each of the Potters have?

The phenotypes of the Potters are:

James Potter (dad)—dark/brown hair

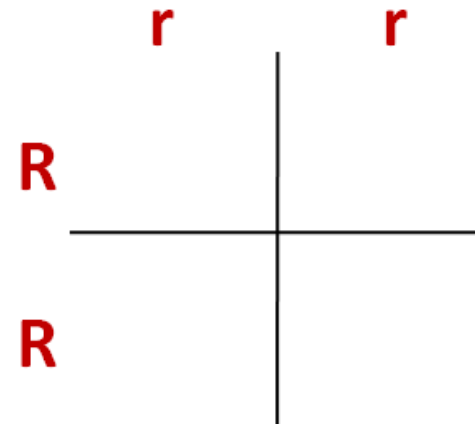
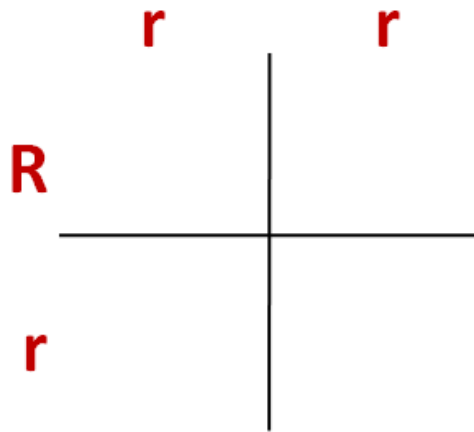
Lily Potter (mom)—red hair

Harry Potter—dark/brown hair

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Using the genotypes of **rr**, **Rr**, and **RR**, what are possible genotypes for Harry's parents?

- Mom-Lily (red hair) = **rr**
- Dad-James (dark hair) = **Rr or RR**



The parents' genotypes lead to 2 Punnett Squares.

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Given Harry's parents' possible genotypes, the two Punnett Squares can be completed as follows:

	r	r
R	Rr	Rr
r	rr	rr

	r	r
R	Rr	Rr
R	Rr	Rr

The **only possible** genotype for Harry's dark hair is **Rr**.